

IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

1-31. (Canceled).

32. (New) A radio communication method for a radio communication system, the radio communication system being composed of a plurality of radio communication devices in such a manner that radio communication devices other than a given radio communication device exist within a communication area of the given radio communication device, each of the plurality of radio communication devices being able to accommodate and manage a radio communication terminal, and the radio communication method being performed by the given radio communication device, comprising:

a detection step of detecting existence of other radio communication devices within the communication area of the given radio communication device;

a time slot division step of dividing a communication period on a wireless medium into a plurality of time slots based on a number of other radio communication devices detected; and

a time slot setting step of setting a first time slot which is different from a second time slot as a time slot which can be used at higher priority by the given radio communication device in order to manage an accommodated radio communication terminal, the second time slot being a time slot which can be used at higher priority by one of the other radio communication devices.

33. (New) The radio communication method according to claim 32, comprising a contention resolution step of performing contention resolution processing when the first time slot and the second time slot overlap each other.

34. (New) The radio communication method according to claim 33, wherein, in the contention resolution step, the given radio communication device exchanges identification information with the radio communication device which can use the second time slot at higher priority, and wherein the given radio communication device determines whether or not setting of time slots should be changed based on a comparison result of the identification information of the given radio communication device with the identification information of the radio communication device which can use the second time slot at higher priority.

35. (New) The radio communication method according to claim 32, comprising a time slot identification information sending step of sending identification information of the first time slot to one of the other radio communication devices, so that one of the other radio communication devices can select the second time slot based on the identification information of the first time slot.

36. (New) The radio communication method according to claim 32, comprising a priority communication step of accessing the wireless medium in the first time slot, using a waiting time shorter than those for the other radio communication devices.

37. (New) The radio communication method according to claim 36, comprising a non-priority communication step of accessing the wireless medium in time slots except for the first time slot, using a waiting time longer than that for one of the other radio communication devices.

38. (New) The radio communication method according to claim 32, wherein, in the time slot division step, the given radio communication device divides the communication period evenly into the plurality of time slots, the communication period having a common length of a common period which is determined among the radio communication devices.

39. (New) The radio communication method according to claim 38, comprising a synchronization step of synchronizing with the other radio communication devices regarding the common period.

40. (New) The radio communication method according to claim 32, comprising a time slot resetting step of, when it is detected that the radio communication device which can use the second time slot at higher priority shuts down, resetting the plurality of time slots so that the second time slot can be used by the radio communication devices.

41. (New) A radio communication device which is a given radio communication device in a radio communication system, the radio communication system being composed of a plurality of radio communication devices in such a manner that radio communication devices other than the given radio communication device exist within a communication area of the given radio

communication device, and each of the plurality of radio communication devices being able to accommodate and manage a radio communication terminal, comprising:

a detection section that detects existence of other radio communication devices within the communication area of the given radio communication device;

a time slot division section that divides a communication period on a wireless medium into a plurality of time slots based on a number of other radio communication devices detected;
and

a time slot setting section that sets a first time slot which is different from a second time slot as a time slot which can be used at higher priority by the given radio communication device in order to manage an accommodated radio communication terminal, the second time slot being a time slot which can be used at higher priority by one of the other radio communication devices.

42. (New) The radio communication device according to claim 41, comprising a contention resolution section that performs contention resolution processing when the first time slot and the second time slot overlap each other.

43. (New) The radio communication device according to claim 42, wherein the contention resolution section is so arranged as to exchange identification information with the radio communication device which can use the second time slot at higher priority, and is so arranged as to determine whether or not setting of time slots should be changed based on a comparison result of the identification information of the given radio communication device with

the identification information of the radio communication device which can use the second time slot at higher priority.

44. (New) The radio communication device according to claim 41, comprising a time slot identification information sending section that sends identification information of the first time slot to one of the other radio communication devices, so that one of the other radio communication devices can select the second time slot based on the identification information of the first time slot.

45. (New) The radio communication device according to claim 41, comprising a priority communication section that accesses the wireless medium in the first time slot, using a waiting time shorter than those for the other radio communication devices.

46. (New) The radio communication device according to claim 45, comprising a non-priority communication section that accesses the wireless medium in time slots except for the first time slot, using a waiting time longer than that for one of the other radio communication devices.

47. (New) The radio communication device according to claim 41, wherein, the time slot division section is so arranged as to divide the communication period evenly into the plurality of time slots, the communication period having a common length of a common period which is determined among the radio communication devices.

48. (New) The radio communication device according to claim 47, comprising a synchronization section that synchronizes with the other radio communication devices regarding the common period.

49. (New) The radio communication device according to claim 41, comprising a time slot resetting section that, when it is detected that the radio communication device which can use the second time slot at higher priority shuts down, resets the plurality of time slots so that the second time slot can be used by the radio communication devices.